

Application No. 09/784,158
Amendment dated January 31, 2005
Reply to Office Action of July 30, 2004

AMENDMENTS TO THE SPECIFICATION

On page 4, please revise the paragraph beginning on line 10 as follows:

In US Patent No. 5,764,609 to Gross et al., a training method for selecting observations of time-correlated sensor data called Min-Max is presented. According to this way of training a model, the collected normal sensor data is condensed or distilled down to a "training set" by selecting those observations (or "snapshots") that contain a global maximum or minimum for a sensor with respect to all values taken on by that sensor across the entire collected sensor data. Thus, as a maximum the number of observations that are include included in the training set that results from the training is twice the number of sensors being modeled. While this method assures the inclusion of extrema for all sensors in the model, it may be desirable to enhance the model with inclusion of other snapshots with intermediate values.

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On page 7, please revise the paragraph beginning on line 10 and continuing onto page 8 as follows:

The present invention is a method system and program product for distilling a training set from a collection of data. According to the invention, for each sensor or parameter provided in the model, all collected snapshots are arranged in a sequence that orders the sensor of interest according to magnitude. The ordered snapshots are then chosen for inclusion in the final training set used as the basis for the empirical model, by segmenting the magnitude axis into equal-spaced segments, and identifying one snapshot for each segment. This is performed for each sensor. More specifically, the magnitude axis is divided into equal segments, and the snapshot with the magnitude for the sensor of interest that is closest to any segment divider value is included in the training set in its entirety. The training set selection can be done on processed or unprocessed data. The data is analyzed and the training set is selected by dividing the data, uniformly or non-uniformly, into as many discrete bins as would yield the desired size for the training set. Various nonlinear options may be selectively included for focusing the behavior of the resulting model to suit specific application needs.